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RAINMAKING THROUGH THE ROCK ART IN EAST AND SOUTH AFRICA: A COMPARISON WITH CURRENT TRADITIONAL TRIBES

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ABSTRACT

[AR] **صناعة المطر من خلال الفن الصخري في شرق وجنوب أفريقيا: مقارنة بالقبائل البدائية الحالية**

كانت صناعة المطر واحدة من أهم الطقوس الحياتية في أفريقيا منذ عصور ما قبل التاريخ لا سيما خلال العصر الحجري الحديث، وذلك بسبب تحول المناخ إلى الجفاف في ذلك الوقت، فأصبح للمطر دور مهم في الحياة، ومن ثم يحاول البحث توضيح أهمية طقوس صناعة المطر كمصدر للمياه، ودور صانع المطر ومكانته المميزة في مجتمعات شرق وجنوب إفريقيا خلال عصور ما قبل التاريخ، وذلك من خلال دراسة مناظر صناعة المطر ورموزه في الفن الصخري آنذاك. تباينت رموز صناعة المطر في الفن الصخري ما بين الرموز الحيوانية والهندسية التي تنوعت بين أشكال الدوائر المتداخلة، الأشكال الحلزونية، النقاط السوداء وجميعها كانت رموز تشير إلى صناعة المطر. ولقد ارتبطت صناعة المطر أيضاً ببعض الطقوس المتعلقة بالسحر، والدين والرقص والصلاة وتقديم القرابين والأضاحي البشرية والدفنات الحيوانية، أما إله المطر فقد ارتبط بالعديد من الرموز مثل قوس قزح والثعبان، وأُعتبر قوس قزح بمثابة قلادة الله. وكان صانع المطر هو الوسيط بين إله المطر وبين قومه. سيتناول البحث أيضًا أهم أماكن صناعة المطر وخاصة التلال والكهوف والملاجئ الصخرية، كما سيوضح العلاقة بين أرواح السلف من الأجداد وصناعة الأمطار، ويوضح أيضاً كيف ارتبطت القرابين والدفنات الحيوانية بصناعة الأمطار في ذلك الوقت، وكيف أكدت رموز الفن الصخري على ذلك. أخيرًا، يهدف البحث إلى إعادة تفسير رموز ومشاهد الفن الصخري التي تدل على طقوس صناعة المطر في عصور ما قبل التاريخ، من خلال مقارنتها بالطقوس الحالية لبعض القبائل البدائية في شرق وجنوب إفريقيا.

[EN] *Rainmaking* was one of the most important life rituals since prehistoric times, especially in the Neolithic era, because of the dry weather at that time, and the centrality of water for life. This article tries to clarify the significance of *rainmaking* and its rituals, and the role of the rainmaker in eastern and southern African societies, by studying *Rainmaking* scenes through rock art and its symbols in prehistoric times. The symbols of *rainmaking* included various animal and geometric symbols. The geometric designs include circles, spirals, and black dots, which related to rain making during prehistoric times. *Rainmaking* connected with rituals that expressed magic, and religion, and were often associated with dances, prayer, and offering sacrifice or burial of animals, especially during the Neolithic period. Rain-gods were connected also with symbols such as the rainbow, since early humans considered the rainbow as the God's necklace, and python snakes. The rainmaker had a great social position in his tribe because he was a mediator between the people and the rain god. The article will also study the most important places of *rainmaking*, which include hills, caves, and rock shelters. These places were associated with *rainmaking* during prehistoric times. The article will clarify the link between the souls of the ancestors and *rainmaking*, the animal sacrifices associated with the *rainmaking* at that time, and the symbols of rock art indicative of that. Finally, the article aims to reinterpret the symbols and scenes of rock art indicative of rain-making rituals in prehistoric times, by comparing them with the current rituals of traditional tribes in eastern and southern Africa.

KEYWORDS: Animal, *rainmaking*, rock art, rainbow, ritual, snake, symbols.

I. INTRODUCTION

Water is one of the most important foundations for life, so early humans believed rain to be scared; they considered it the root of life. *Rainmaking* is depicted in prehistoric rock art in Africa, especially in East and South Africa, and it is still known in numerous African communities. «*Rainmaking*» means the actions or rites done for making rain[1]. God creates rain for people. Hence, the rainmaker must request god's rain. The term *rainmaking* point to local practices and rituals associated with rainfall, and this term is connected also with the rainmakers who have the power to perform those rituals[2].

In African belief, rain may be invoked with prayers. Both private and public, *Rainmaking* rituals are reported in all parts of the African continent. Riverbanks, waterfalls, groves, caves, or mountains may be used as places for rain rituals. Rainmakers occupy a position of significant impact in the community. They do not only make rain but also stop it when too much comes or when it is not welcome at a given moment[3].

The article aims to reinterpret the symbols and scenes of rock art that indicate *rainmaking* in prehistoric times, by comparing them with the current rituals of the tribes in eastern and southern Africa.

II- THE GOD OF RAIN

Rain was important in African religion and mythology. Early humans expressed the rain god through rock art, by drawing rain symbols, or by depicting kinds of rain animals. The existence of the god of rain is seen in African tribes. Many African traditional tribes think that rain indicated that the god is weeping; water was the god's tears, and therefore rain was considered a sacred gift. When it failed to rain, that meant something wrong had happened. The Shaman was responsible for making rain by performing rituals[4].

At Nuer (Sudan) for example, the rain god is considered as a «Spirit in the Sky», who was associated with the sun, moon, stars, and natural phenomena, and his words were like thunder and lightning. The rain god united with the rainbow which is called the «god's necklace»[5]. In (Sudan) the shaman connected the god with the people, and he was responsible for making rain[6].

There are many natural phenomena associated with rain or the deity of rain, such as lightning and thunder. So, the mighty roar and fiery light can fill the mind with images of the supernatural and bring forth both fear and reverence. For that reason, "celestial thunder" is recorded in the mythologies of various cultures. Thunder is personified as a spirit inherent in the storm, and it has been looked upon by many cultures as the voice of a god. Sacred Thunder often «chose» future shamans by hitting them with lightning[7].

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[1] SOUKOPOVA 2020: 80.
[2] OMBATI 2017: 81.
[3] SOUKOPOVA 2020: 80.
[4] LYNCH 2010: 108.
[5] LYNCH 2010: 71.
[6] LYNCH 2010: 92.
[7] PARKMAN 1993: 90.

In the Itanda waterfalls in Uganda tribes, there are several symbols associated with the deity of rain, such as the rainbow, and the python. Even the rain god must create rain, not by magic, but by filling heaven with physical water flowing in the river. The force of the waterfalls testifies to the immense powers of the rain god and the python, and the rainbow connected with heaven to create the rains[8].

Many African societies connected god with the sky; when it rains, the Masa people living near Lake Chad say, «God is falling». The clouds are God´s body and when it starts to rain the Masa and Nuer in southern Sudan and Ethiopia say, «God copulates with Earth» or «God gave birth». While rain is a direct manifestation of God, or sometimes even a personification of God, water bodies such as lakes or rivers are entities dominated by water spirits. Water was the main component of ancient rituals: in Egypt, the first rite performed at the king´s accession was his symbolic purification with the water of life[9]. According to Uganda tribes, the river-Gods live in the river and the waterfalls, and is related to a beautiful cosmology, shining like the rainbow itself. The rain-God is linked also with the pythons, and the waterfalls[10].

III- THE RAINMAKER

According to early people thoughts, the events in the world we live in are directly dependent on two features: the first is the unseen power or heavenly power, and the second feature is the belief that specific persons can contact other worlds or unseen powers. In this way, these persons can affect our life[11]. The rainmaker is commonly the most remarkable one during prehistoric times and today; he resolves problems according to set societal rules, and he is responsible for all general life[12].

Rainmaking is still practiced today in many African cities and tribes. In Kenya, especially among the Akamba community, *rainmaking* is performed through dancing rituals, which are public events lead by rainmakers who are believed to have the energy and power to create rainfall[13]. In African thought, the contact with the other world is made through a visit by auxiliary spirits. The shaman is linked between these spirits and *rainmaking* through symbols often in animal form, such as the snake **[FIGURE 1]**. Shaman figures appeared in most rock art related to *rainmaking*. In traditional Africa, the rainmaker could use this energy for healing, and *rainmaking* in his community[14].

[8]OESTIGAARD 2019: 12.
[9]SOUKOPOVA 2020: 80.
[10]OESTIGAARD 2019: 10.
[11]LYNCH 2010: 111.
[12]WENDORF 1998:117.
[13]OMBATI 2017: 82.
[14]LYNCH 2010: 111.

[FIGURE 1]: *Rainmaker* holding a snake. CLOTTES 1998: 24.

East Africa contains numerous examples of rock art, but the largest rock art site is in central Tanzania (Kondoa) where some pictures may be dated to 7,000 years old. Around the Lake Victoria Basin, there are many sites containing geometric paintings originally made by hunter-gatherers. These places are still used as sacred places for making rain, while the same practice is noted also in Northern Kenya in the Kerio Valley[15].

The famous images at Game Pass Shelter were interpreted as a sequence of «trance images» in visible form. Rainmakers invited the ancestors' souls to support this duty. The soul shapes were of various animal figures. These soul shapes are pictured as wasted, symbolizing their condition as lifeless, but not anymore completely human. This is of course confirmed in southern San rituals[16].

Among the Southern-Bushman San of the Transkei region of South Africa, the rock cave art reflected symbols of shamanistic nature associated with trance. The San descendants lived in rock shelters and visited caves situated adjacent to rivers to conduct *rainmaking* rituals[17].

The prevailing thought was that Rainmakers, or «Shamans», were entering a trance for making rain in the invincible realm. During droughts, the San were summoned to come and pray for rain. On such occasions, the rainmaker disappeared into isolation to the rock shelters in secret and experienced a trance, sometimes described as a dream or vision, and in return, it would rain[18]. Shamanistic art relates to the power of persons to affect their tribe during their trance journeys. Most of those rituals connected with *rainmaking* was shown in rock art[19].

A picture containing details from a large panel of Bushman paintings was found in Zimbabwe.**[FIGURE 2]**. The panel, from a ceiling of a cave in South Africa's Drakensberg, shows a man sleeping on his side, wearing the antelope's head; it depicts an important rainmaker or Shaman reclining in trance.

[15]TARA 2010: 6.
[16]SOLOMON 2006: 105.
[17]OMBATI 2017: 88.
[18]OMBATI 2017: 88.
[19]WOODHOUSE 1989: 17.

The oldest Zimbabwe paintings are 7,000 years old; one depicts two therianthropes with antelope heads and hooves. The right-hand figure is covered in feathers[20].

[FIGURE 2]: Bushman painting in Mashonaland, Zimbabwe. TARA 2010: 45.

Despite the importance of the rainmaker in Africa, the rainmakers were often killed if they failed to bring rain, or would lose their authority when they grew older[21].

IV- ANCESTORS AND *RAINMAKING*

In Africa, the spirits of ancestors are linked with rain making, and their powers are derived from their ancestors and their gods. The rainmaker was a common factor between his tribe and the rain god[22].

In Africa, ancient spirits were able to bring rain through their thoughts, in which they overcome evil spirits and foretell the future[23]. The rock art expressed *rainmaking* and the role of the ancestors in *rainmaking*. There were many types of rock art associated with the ancestors' worship in places that related to sacrificed animals, which were slaughtered at these sites to ensure rainfall, health, and good harvest in society[24].

In Zambia, the ancestral spirits played a significant role in making rain. The «mizhimo» was the person who contacts humans and God. The rainmaker in Sudan received his tools and powers to get rain from the ancestors and establish his connection with God[25].

In the Shona community in Zambia, the ancestor's souls were sacred and connected with the rituals of *rainmaking*. Shona people were interested in providing the most sacrifices to their royal ancestors because their spirits needed to be prayed to for the *rainmaking* rites. There was a deep respect for the ancestor's souls, especially the royal tribe's souls in the Shona society, so, worship of the spirits of earlier primordial people was necessary for *rainmaking*[26].

[20]TARA 2010: 45.
[21]WENDORF 1998: 117.
[22]WENDORF 1998: 117.
[23]TARA 2010: 48.
[24]KILONZO 2017: 70.
[25]LYNCH 2010: 10.
[26]HUMBE 2020, 34.

The community of «Zimunya» usually provides offerings to the rain spirit by preparing beer on the day of the celebrations. Six pots of beer are brought to the hill and a pot is offered to each ancestor buried at the site. Some of the beer is splashed onto the rock paintings. The ceremony is characterized by singing and dancing[27]. It was thought that ancestors, other local or natural spirits, and God were able to control the elements of life, especially rain through the rituals performed at sacred places like shelters, hills, and caves[28]. The «Akamba» community in Kenya believed that invisible *rainmaking* ancestral spirits attended the «Kilumi dances». These dances were accompanied by the pouring of libations and the offering of sacrifices to calm the spirits. Dryness was assumed as damnation for evil while rainfall indicated success[29].

V- RAIN PLACES

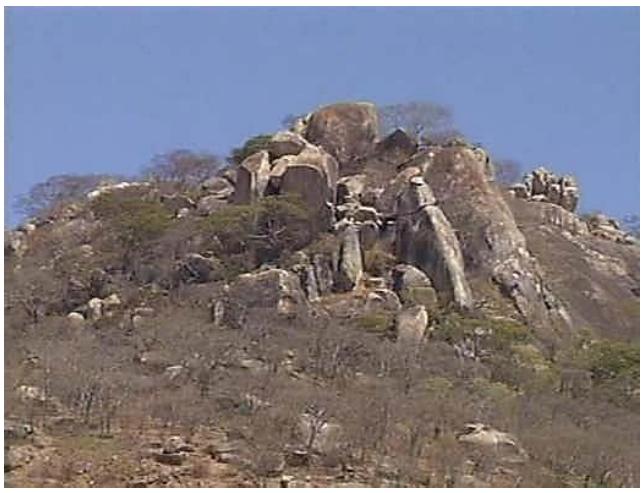
Mountains, caves, shelters, and high places were considered sacred places and were associated with rain in Africa. Rain rituals were frequently associated with mountains and stones.

1. *Rainmaking* Hills

Because of the importance and sanctification of the mountains, rainmakers climb specific mounds, such as the Zimbabwe hills, to draw the rain down. *Rainmaking* hills in Africa are distinctive in that these are hard to reach; they are steep, tiny and unstable, and covered with pottery and offerings offered on the hill from several periods. The rain hills are the mountains that are the root of rivers; these rain hills stand out at the site, in the land of miraculous forces[30].

In Shona, the rock art sites and mountains, hills, perennial pools, and big trees, are all considered sacred places, especially by the current Shona people. One such rock art site, Zimbabwe hill, is a major *rainmaking* center of the Zimunya community[31]. The main ceremony for the community is held at this painted hill. Archaeologically, it is accepted that the rock art was drawn by Late Stone Age hunter-gatherer communities who used to inhabit the whole of southern Africa before the Bantu people arrived about 2000 years ago[32]. Zimbabwe Hill consists of different rock shelters **[FIGURE 3]**. The painting appeared in one instance where three large panels made up of stone artifacts on the floor. The art includes both human and animal figures. Interestingly, it is also one of the only two sites out of over one hundred rock art sites found in the Zimunya that have depictions of giraffes. The dominant painted animal is the kudu, which is a ubiquitous animal in the rock art of Zimunya[33].

[27]PWITI 2007: 105.
[28]PRINS 1994: 177.
[29]OMBATI 2017: 82.
[30]HUFFMAN 2011: 66.
[31]HUMBE 2020, 93.
[32]PWITI 2007: 104.
[33]PWITI 2007: 104.



[FIGURE 3]: Zimbabwe Hill, Zimunya. PWITI 2007: PL.1.

The Zulu, for example, make collective pilgrimages to certain hills to bring an end to droughts, whereas Pedi, Tswana, and Venda rain-controllers use hills, which are off-limits to other members of their communities[34].

Excavations at other rock art sites in this area indicate that they date to the eighth millennium BC. Another shelter has house remains and pottery, showing its use as a settlement site in later prehistoric times. The rain custodian also informed us that the hill was also used for settlement by his ancestors before they moved to the plains below the hill. After this, it was used as a burial place and for rituals associated with *rainmaking*[35]. The archaeological evidence of pre-historic ceremonial rites and behavior proved that in South Africa the rainmakers, in times of severe drought, climb specific hills to bring rain. So, they considered the *Rainmaking* hills as a source of streams and cisterns that represent pools. These *rainmaking* sites stand outside home settlements, on hilltops associated with heavenly bodies. At the sacred sites, rituals incorporated the roles of every citizen in the city; these rites involved the daily behavior of the community[36].

2. *Rainmaking* Caves, Shrines, and Rock Shelters

Caves and shrines were among the places that were associated with rainmaking during prehistoric times, and even among many of the current tribes. In northern Sudanese tribes, there are shrines or sacred places, used by the rainmakers as common divine places[37].

In South Africa, caves are considered sacred places for making rain. Rain medicines are often kept in caves or small rock shelters. Zulu rain-controllers use caves because they must keep their rain medicines in a cool location. Nineteenth-century Pedi and Tswana chiefs also used rock shelters. In the Northwest Province, shelters and caves were key pre-colonial rain-control sites. Caves are «sacred places» for the Venda. The last topographic feature is pools or other bodies of water[38].

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[34]SCHOEMAN 2006: 154.
[35]PWITI 2007: *105.*
[36]OMBATI 2017: 85.
[37] WENDORF 1998: 117.
[38]SCHOEMAN 2006: 154.

The caves that were confirmed as sacred places were used by both the San and Bantu speakers for *rainmaking* rituals, and were decorated with art. Caves are known as divine *rainmaking* places. Moreover, in the Matopos in Zimbabwe, the iconography contains, geometric designs, like lines, and finger paintings[39]. As to be expected, «*rainmaking* shrines», were considered sacred places, and used for the rain making rituals. These places connected with the religious practices of other sites, though most rites were done in the caves in Zimbabwe[40].

In Zimbabwe, the granite stones, and rock shelters played an acute role in human beliefs about life at this time. The link between the rock shelters and caves with *rainmaking* and a belief system was manifested there. It is no accident that other important religious places are characterized by natural rock shelters, caves, and hills[41].

So, a shrine in Zimbabwe is a religious site that contains tribal systems, such as Totems, motifs of the local identity, since it was the home to Zimbabwe's ancestral spirits. As a result, the rock shrine continues to play a major ceremonial function and hosts various religious rituals connected with *rainmaking*. Zimbabwe communities have continued to use the site for *rainmaking*. Because the *rainmaking* shrines in Zimbabwe were known as divine places these sites were protected by various taboos and Totems[42].

In East Africa, in the Uganda community, the rock shelters were used as hunting camps and also as ceremonial places for rites. The rainmakers lived in caves and were associated with them like their ancestors[43]. The rain animals were pictured on the walls of rock shelters, and sometimes, the less common animal was painted in a faint color, while the most prevalent animal was depicted in vibrantcolor. The death of the shelter-keeper or the rainmaker, and sometimes after the death of the rainmaker and his sacred-animal, was marked by drawing his rain animal on the walls of the rock shelter. In the Bantu community in South and Central Africa, rock shelters were considered sacred places for ceremonial rituals. The Bantu people often scratch off some of the colors, believing that there is a power within the raindrops, treats diseases, and provides other benefits. The farmers still use the rock shelter with natural drawings to bring the rain for them, and there is a belief that the cave is a heavenly place that connects them to the ancestors[44].

Paintings are believed to have magical powers. Rain rituals are reported also in north Africa, from the Tassili mountains in Algeria. Milk and oil are poured into the Tin Tekelt shelter, which has prehistoric rock art, suggesting that it has been used as a ritual place for several thousand years. Some of the mythological themes circulating in Africa today seem to be thousands of years old. In the field of religion, people are extremely conservative and although various peoples in Africa are separated by great distances, their philosophical systems are fundamentally similar.

[39]PRINS 1994: 177.
[40]NDORO 2005: 35.
[41]NDORO 2005: 35.
[42]NDORO 2005: 8.
[43]ROBERTSHAW 2012 :104.
[44]FERNÁNDEZ 2011:290.

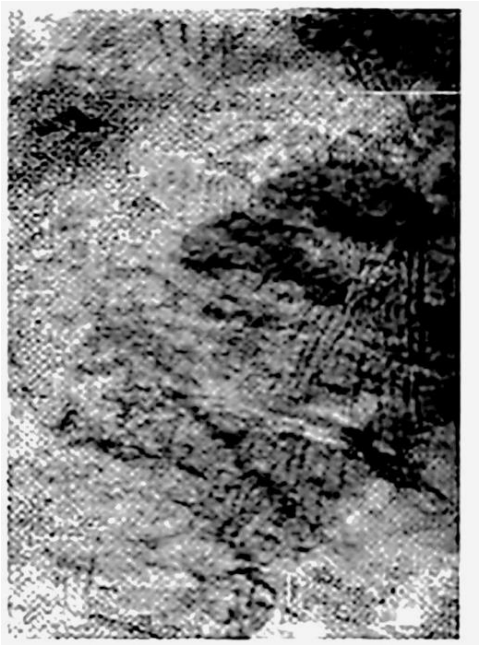
Very little has changed over time with the *rainmaking* rituals in northern Nigeria and South Africa. Some sites may have been used for *rainmaking* rites for thousands of years[45].

In Bantu in South Africa, the rock shelters were used for ceremonial rituals for *rainmaking*, and in northern Transvaal are additional *rainmaking* shelters, which are decorated with different motifs and symbols. This may be related to a belief that caves, holes, and rock shelters provided access to the ancestor world, and were places connected to the ancestor's spirits and other gods[46].

As noted above, rock art sites are regarded as sacred and spiritually powerful places and are also being used in other unusual ways for the well-being of contemporary Bantu communities, besides *rainmaking*. In Botswana, the rock art sites at the Tsodilo Hills have historically been used for *rainmaking*[47].

VI- THE RAIN ANIMALS

Rainmaking was shown in rock art throughout its scenes, and attention to clouds was prevalent in rock scenes. An image from the Wodehouse District, South Africa[FIGURE 4] shows clouds with rain downfall[48].



[FIGURE 4]: Clouds and rain (Wodehouse District)- South Africa. WOODHOUSE 1989: ILLUS. 27.

[45]SOUKOPOVA 2020: 81.
[46]PRINS 1994: 177.
[47]PWITI 2007: 107.
[48]WOODHOUSE 1989: 24.

In east and south Africa, there are several symbols that appear in rock art associated with *rainmaking*. They varied between animal and geometric symbols and other figures connected with *rainmaking*. The rock art in the Central Saharan Round Head art is attributed to hunters living in the region from 10,000 BP. There are unidentifiable quadrupeds that bear striking similarities to the southern African rain animals: they are bulky, hippopotamus-like, and head down. Sometimes their bodies are filled with decorative elements that could be interpreted as rain, such as dots or dotted stripes and parallel lines exiting down from their bodies. The back of these animals is often made of two parallel lines, which is a later repainting: if it was indeed a rain animal in a *rainmaking* place, with each ritual the image was simply repainted instead of making a new one[49] **[FIGURE 5]**.

[FIGURE 5]: Bulky quadruped, head down, with internal decoration made of dotted stripes is interpreted as a rain animal, Libyan- Acacus. SOUKOPOVA 2020: FIG.15.

The existence of rain animals is attested to in southern African rock art. They are often rounded, big bodies evoking a hippopotamus[50].

1. The Eland

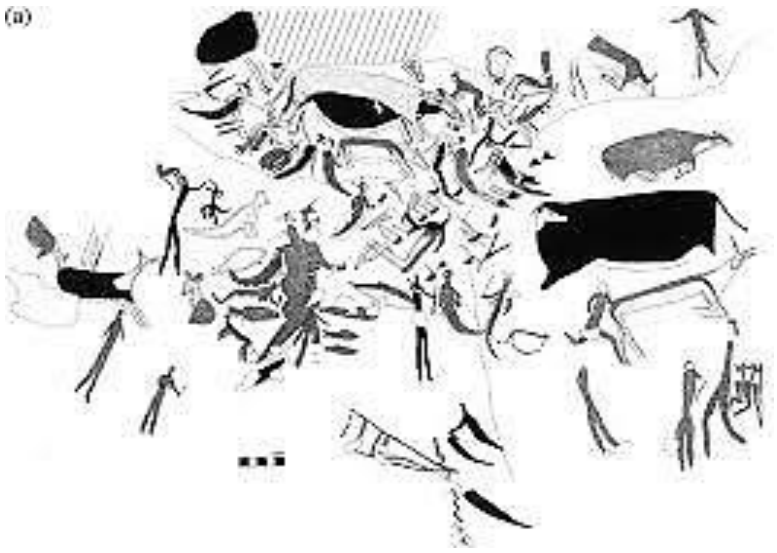
Eland was one of the most important rain animals. In the Kalahari, for example, Eland relates to rain. Also, in Bushman culture eland was painted before them as one of the rain animals in the shamanic art[51]. The eland is the chief animal of the San (Botswana, Namibia, South Africa), who considered it the rain animal because it is a major food source, and serves an important religious role as a sacred symbol, or totem. The eland relates to ancestor's spirits. When an eland dies, the shaman performs some rituals, such as dancing, and jumping, and invites the spirit of the animal to enter his body. The power of the animal spirit is used to make rain and heal diseases[52].

The Eland paintings were often associated with red lines on the faces, which is depicted in some rock arts such as **[FIGURE 6]** and **[FIGURE 7]**. These figures depicted a supernatural ability to live underwater, which is related to the rain making ritual.

[49]SOUKOPOVA 2020: 84.
[50]SOUKOPOVA 2020: 83.
[51]LEWIS-WILLIAM 2004: 208.
[52]LYNCH 2010: 64.

Painting certain parts of the body such as the elad's horns, was engaged in ritual, either to make rain or to separate a serious thunderstorm[53].

The red color relates to blood and life, and is aligned with the fantastic imagery of a deep trance, in which the color red enhanced the power of the ritual[54].



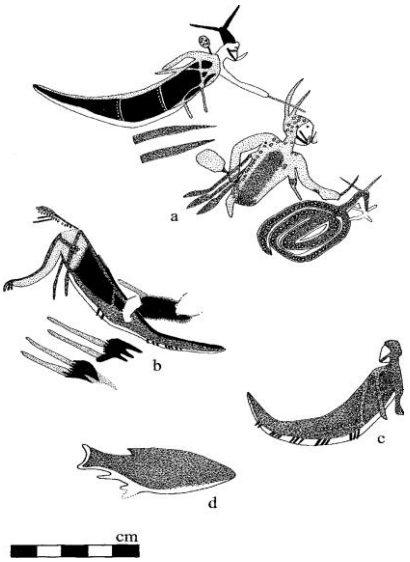
[FIGURE 6]: The rain animals and red lines- Kalahari- South Africa. LEWIS-WILLIAM 2004: FIG.3.

[FIGURE 7]: Eland horns in a rain-control panel- - Kalahari- South Africa. LEWIS-WILLIAM 2004: FIG.3.

[53]LEWIS-WILLIAM 2004: 210.

[54]LAHELMA 2008: 60.

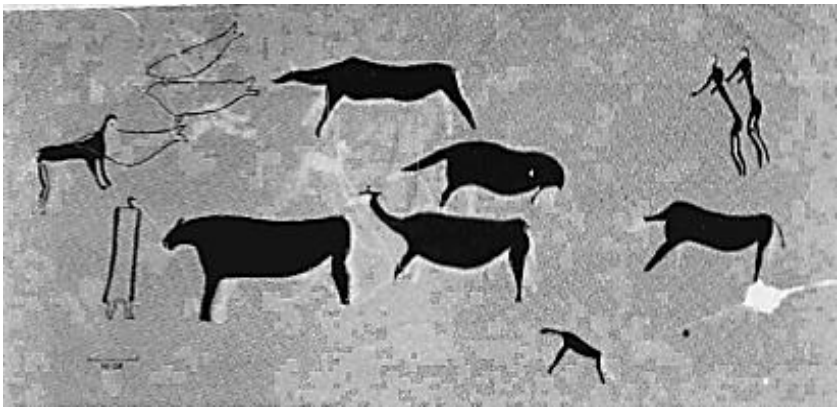
There are more than sixteen figures of Eland rain, some partly protected, known as «parts of Eland». They portray the top parts of elands' heads, and there is also a separated couple of eland horns in the upper left of the picture. This couple and others are pictured in San rock art with black color, whiel some were painted in white color. Among the other details that appeared in San's art were two human figures with eland horns. The focus was very clearly on the horns as a part of the animal[55] **[FIGURE 8]**.



[FIGURE 8]: Selected images from FIG.7-Kalahari- South Africa. LEWIS-WILLIAM 2004: FIG.4.

The Eland was also most frequently painted in the Natal Drakensberg and Lesotho in Southern Africa. Most paintings clearly depict the Eland as a rain animal and portrayed the people holding the Eland's tail, which surely illustrates the rain animal[56].

The famous scene at Prozesky's Shelter shows **[FIGURE 9]** a sitting mythical being with wings and porpoise-like fish, which relates to *rainmaking*[57].



[FIGURE 9]: Rain eland (Clocolan District)- South Africa. WOODHOUSE 1989: ILLUS.26.

[55]LEWIS-WILLIAM 2004: 209.
[56]WOODHOUSE 1989: 24.
[57]WOODHOUSE 1989: 24.

2. The Snakes

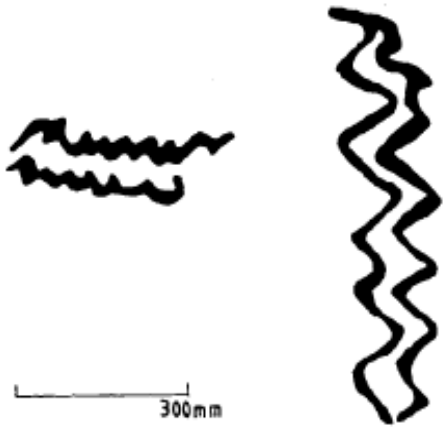
Snakes played prominent roles in African mythology, and were commonly associated with rain and the rainbow[58]. In middle Africa, the Democratic Republic of the Congo snakes were associated with making rain[59].

In East Africa, in central Malaŵi, pythons were kept in baskets at shrines. The snake, called Thunga, was the central cult object associated with the shrine and the sacred pool. Thunga and the python are also linked to the rainbow. The Chewa believe that a python always lies underneath and that the rainbow is the breath of the python. A python is related to healing and rain rituals[60]. In west Africa, the Baga of Guinea held the snake sacred because they connected with their ancestor's souls. So, snakes played various roles in several African cultures[61].

Long lines, sometimes laying horizontally and other times vertically have been interpreted as snake-like motifs. A single, snake-like line design is found at a significant percentage of sites, but this has no obvious parallel in eastern Zambia[62].

In Zimbabwe in South Africa, the Zulu and Cape Nguni rainmakers go to pools or streams to wait for the snake. The snake is depicted at the top a large rock on its top, and is drawn with a human figure next to it, pointing to the rainmaker[63].

Snakes were linked with *rainmaking* and fertility in several places in South Africa. In ancient Zimbabwe, the relationship between souls, kings, ancestors, and rain making appeared through Snake-like scribbling's. They appeared in graphical depictions of serpents that occur in finger paintings[64] **[FIGURE 10]**.



[FIGURE 10]: Snake-like scribbling's at Rukurongo, Lake Victoria. PRINS 1994: FIG.6.

[58]LYNCH 2010: 10.
[59]LYNCH 2010: 20.
[60]ZUBIETA 2006: 103.
[61]LYNCH 2010: 114.
[62]ZUBIETA 2006: 102.
[63]WOODHOUSE 1989: 24.
[64] PRINS 1994: 180.

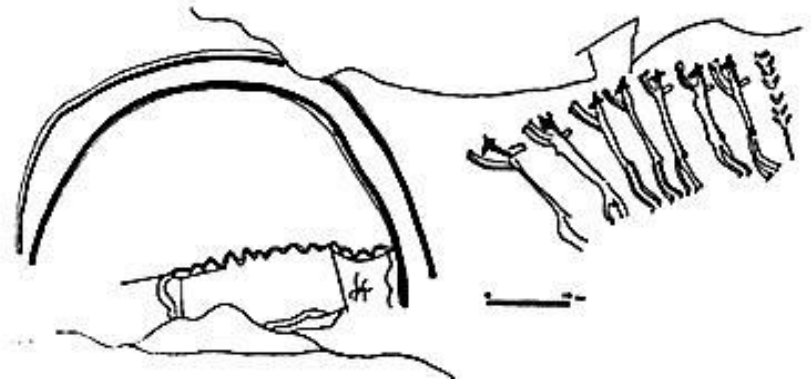
The snake was considered a particularly important totem in most African civilizations, because it relates to healing, fertility, and *rainmaking*. Snakes were related to other iconography such as the rainbow, and other mysterious symbols. Snakes were also connected with quickness, and power, which are characteristics related to innovation and renewal, and eternity[65].

In Africa, rainbows relate to snakes and *rainmaking*, from the Itanda- on the White Nile River in Uganda- waterfalls help create perfect, beautiful rainbows. The cascading torrents of water in the waterfalls splash water high into the air. One can see the water droplets being dragged up to heaven. The rainbow is like a reversed waterfall, filling heaven with water[66]. Because the rainbow is linked to rain, it also plays a significant role in different mythologies. In the Lotuko of Sudan, the rainbow is seen as a viaduct between sky and earth[67]. The rainbow was interpreted in the Yombe of Zaire in Congo as a water snake or rain serpent, Mbumba, who ascends to the sky by climbing trees; in this case, it was known as the cosmic serpent. As for the Nuer of Sudan, the rainbow was known as «God's necklace»[68].

The rainbow snake is often considered the guardian monster of wells, and was also the breath of a great serpent. This cosmic serpent was responsible for bringing rain and making rivers[69].

The link between snakes and *rainmaking* is illustrated through the connection between snakes and water, especially in San mythology. Many San people believe that snakes relate to bodies of water and in some instances, the creation of these bodies of water[70].

Since the snake was considered a guardian of water sources, some considered the snake a totemic symbol. In Southeast Africa, at Beersheba at a site in Ficksburg, a figure shows a group of human bodies dancing and jumping, and in front of them, the rainbow shape is depicted in an explicit reference to the ritual of bringing rain **[FIGURE 11]**[71].



[FIGURE 11]: Dancing therianthropes with rainbow Ficksburg District. WOODHOUSE 1989: 22.

[65]LYNCH 2010: 114.
[66]OESTIGAARD 2019: 11.
[67]LYNCH 2010: 108.
[68]LYNCH 2010: 109.
[69]LYNCH 2010: 114.
[70]TURNER 2012: 108-110.
[71]WOODHOUSE 1989: 24.

According to **Woodhouse** , in explaining what a picture of a rain animal means to the Bushman, that snakes are associated with *rainmaking* practices throughout southern Africa. Many pictures of rain snakes are portrayed by the dots as water that fall from them[72].

Depicting rainbows in the rain-making scenes was normal; the rainbow was associated with rain, and its colors were seen immediately after the rain fell.

3. The Crocodiles

In Africa, crocodiles are illustrated in many rock art sites and were considered symbolic of fertility and associated with water. In Venda and the Bemba, the crocodile was associated with the rain rituals and preserving the fertility of the earth, while the pool of water was associated with the eye of a crocodile. The spiral design and circles refer to the crocodile's eye and its relationship to making rain[73]. These were considered to be the sacred blessing of the ancestors.

People in the Lowveld Sotho community wear crocodile masks as totems during rituals. This community also made clay statues of crocodiles, amongst other objects, which were a part of their culture[74] **[FIGURE 12].** Because crocodiles are reptiles that live in water, the association of the crocodile with rain making was logical and reasonable, Therefore it is normal to take use the crocodile as a symbol in *rainmaking* rituals.

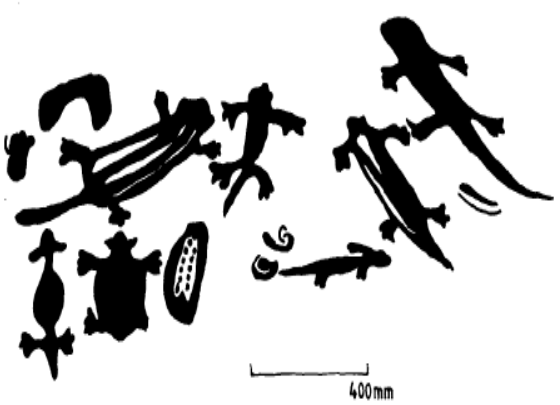
[FIGURE 12]: Crocodiles as motifs of *rainmaking* at Thandwe, eastern Zambia. PRINS 1994: 185, FIG.7.

[72]WOODHOUSE 1989: 20.
[73]PRINS 1994: 179.
[74]PRINS 1994: 184.

Lizards also played a significant part in the rain making rituals. In Makgabeng, in northern Transvaal, southeast Africa, lizards were shown to be contributory to *rainmaking* rites. In northern Sotho group rain ceremonies, some finger paintings of lizards and other motifs were depicted in shelters.

It is undecided whether monitor lizards were also linked with *rainmaking* in the north as well, but it is certain that numerous painting motifs establish a link between lizards and crocodiles **[FIGURE 13]** strongly suggesting they are tied with *rainmaking*[75].

Because lizards were desert reptiles, one might ask what their role is in the rain rituals? In this case, the lizards were referencing the desert and a desire to transform this arid land through rain.



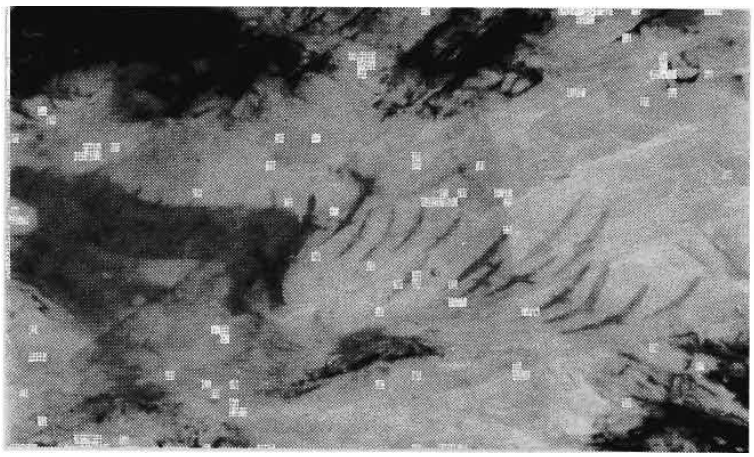
[FIGURE 13]: Lizards as rain motifs at MsuLe Irimiya, Tanzania. PRINS 1994: FIG. 5.

Some kinds of lizards can walk on water. These lizards are distinguished by their amazing ability to run over the water without drowning. Such lizards are able to run with tremendous speed and accuracy on the surface of the water so that it maintains the balance of its body upwards without submerging in the water. These lizars use theirin tails to maintain balance so as not to fall on one of its sides. So, because of their proficiency in water, both water monitors and the mangrove monitors have spread over huge areas and inhabit numerous islands[76]. All these reasons are why the Lizard is considered a kind of rain animal (amphibian).

5. The Elephant

Elephants were of the most important rain animals in Africa. Because they carry water with their snouts and spray it on their bodies like a fountain, Africans associated the elephant with rain rituals. Elephants were associated with *rainmaking*, at Mrewa in Zimbabwe and have also been depicted also in the Eastern Cape where an elephant is pictured with vultures on the roofing of a rock shelter. This same painting shown in the Western Cape too[77] **[FIGURE 14].**

[75]PRINS 1994: 180.
[76]BENNETT 1995: 30-31.
[77]WOODHOUSE 1989: 22.



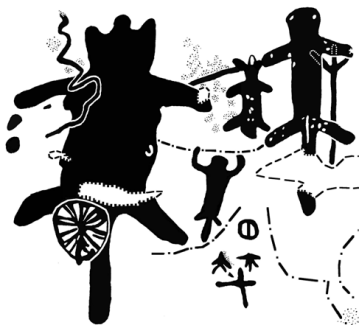
[FIGURE 14]: Rain elephant on 'roof' of shelter (Uitenhage District. WOODHOUSE 1989: ILLUS. 12.

The elephant was sometimes depicted on visible high rocks, which are some of the features that distinguished Zimbabwe. Elephants were also painted inside the caves and on the rocky hills as sacred places for *rainmaking.* In Ruchera Cave in the Mtoko region in Zimbabwe, the elephant was pictured nearly life-size, emphasizing its importance[78].

4. The Eagle

The eagle was one of the birds connected with *rainmaking* in Africa. Some spread-eagled designs are found in many sites associated with other designs such as circles, and snake-like forms. These figures are steeped in symbolism. For example, in the Chewa culture of south-central Arica, the python was a messenger of God and is invoked in both stopping and providing rain. Snake-like forms and spread-eagled designs have positive, effects, but also negative effects. The White Spread-eagled tradition displays some interpretative challenges[79].

These challenges are complicated because the convention of depicting the spread-eagled designs make it difficult to recognize which species of animals are being represented. A picture can often depict a non-material subject, and sometimes a painting is not recognizable to people who are unaware of local conventions of depiction or iconography. It has thus been through a contextual analysis of the links between the Chinamwaliin Southern Malawi, and the rock art tradition that some of the meanings can be discerned.[80] **[FIGURE 15]**.



[FIGURE 15]: The spread-eagled, circles, and snake. ZUBIETA 2006: FIG. 4.22.

[78]WOODHOUSE 1989: 20.
[79]ZUBIETA 2006: 105.
[80]ZUBIETA 2006: 105.

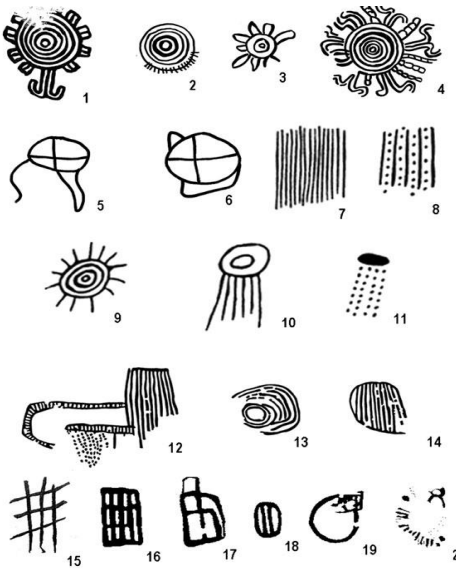
The black dots depicted on the bodies of some spread-eagled designs were also used to resemble the dotted pattern of the python. The python is believed to bring rainfall and fertility to the land and humans. Black is related to rain and fertility, and it is the color of the cloth that covers the sacred drum of the Chewa, which are used in rain ceremonies. Black is also the color in which Makewana in central Malawi dressed[81].

Another animal depicted in the White Spread-eagle tradition is the chameleon because of its role in Chewa myths as the symbol of life and creation.

Although the meaning of each of the figures in the panel is unclear, to interpret any of the associations of the figures it is important to keep in mind that the figures are linked to the *Chinamwali* ceremony in Southern Malawi[82].

VII- THE SYMBOLS OF GEOMETRIC DESIGNS

The symbols of rock art were associated with several topics, the most important one was rainmaking. Geometric designs are also connected with rain making, which appeared in many rock art sites in North, East, and South Africa. In the rock art of San, for example, there are many geometric motifs collected through the rock art as shown in **[FIGURE 16].** Some motifs such as straight lines and dotted bands resemble rain [83].



[FIGURE 16]: Geometric symbols of rock art related to rainmaking. FERNÁNDEZ 2011: FIG.8.

Fernández collected many motifs of geometric designs related to *rainmaking*. In Zambia for example, he recorded straight lines, spirals, circles, and suns, and he argued that these symbolize climatic features, such as water, *rainmaking*. So, in the Katulula community in Zambia, stones are thrown at the rock art sites as a ritual to bring rain. This stone-throwing ritual is still practiced in some African rock art sites today, for the same purpose[84].

[81]ZUBIETA 2006: 108.
[82]ZUBIETA 2006: 108.
[83]FERNÁNDEZ 2011: 290.
[84]FERNÁNDEZ 2011: 290.

The concentric circles were the most important design connected with *rainmaking* in Nero (Uganda). An ancient local race of dwarves known as «yellow-skinned dwarves used the rock art sites in ritual *rainmaking*». **Fernández** confirmed this by the red lines pictured on the shapes in many rock paintings in Zambia with the motifs painted by dwarves from neighboring Congo on tree bark and animal skins[85].

Zubieta has suggested that the circles motifs and crescents reerence the connection between the lunar cycle and female menstruation. Even more, according to him, these circles may refer to the egg as a representation of life.

The geometric rock art in Zambia and Malawi consists of red designs and fadingwhite designs. The images in Zambia and Malawi include fantastic animals that emphasize the ears and the horns in in a composite view. The art found in the Lake Victoria Basin contains geometrical red and white dingy designs, containing dots, concentric circles, and spirals[86] **[FIGURE 17] & [FIGURE 18]**.

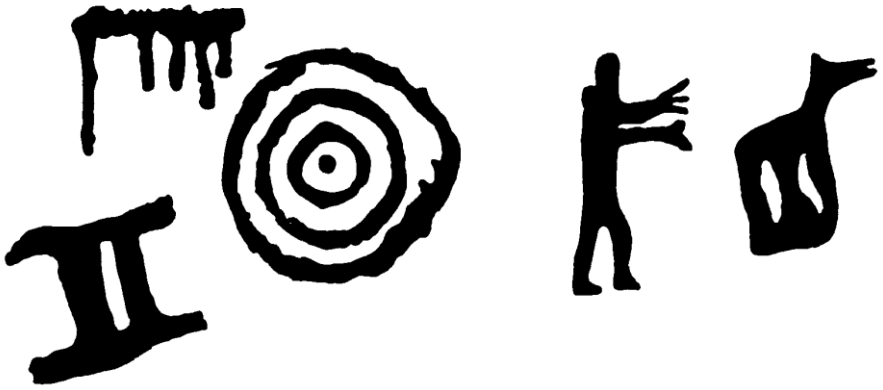
[FIGURE 17]: Spiral circles with sun rays - a shelter on Mfangano Island, Lake Victoria. TARA 2010: 37.

[FIGURE 18]: Concentric Circles, from a shelter in Lukoba Island, Tanzania. TARA 2010: 44.

Kharodia supposed that there is a connection between the motifs of this schematic art which consists of many geometrical designs with red and white lines. The motifs contain circles with spiral lines, oval shapes, and wavy lines like zigzags. Some of these designs could symbolize the sun, rain, clouds, which are all motifs that are connected to *rainmaking* cults[87].

[85]FERNÁNDEZ 2011: 292. 9
[86]TARA 2010: 37.
[87]KHARODIA 2006: 34.

Circles and spiral designs were more widely variedin several sites of east Africa. These motifs connected with the rainmaker or Shaman and his position but were also used in various fields connected with fertility and augury. That combination of symbols and their repetition indicate their association with rain making rituals in African rock art[88] **[FIGURE 19].**



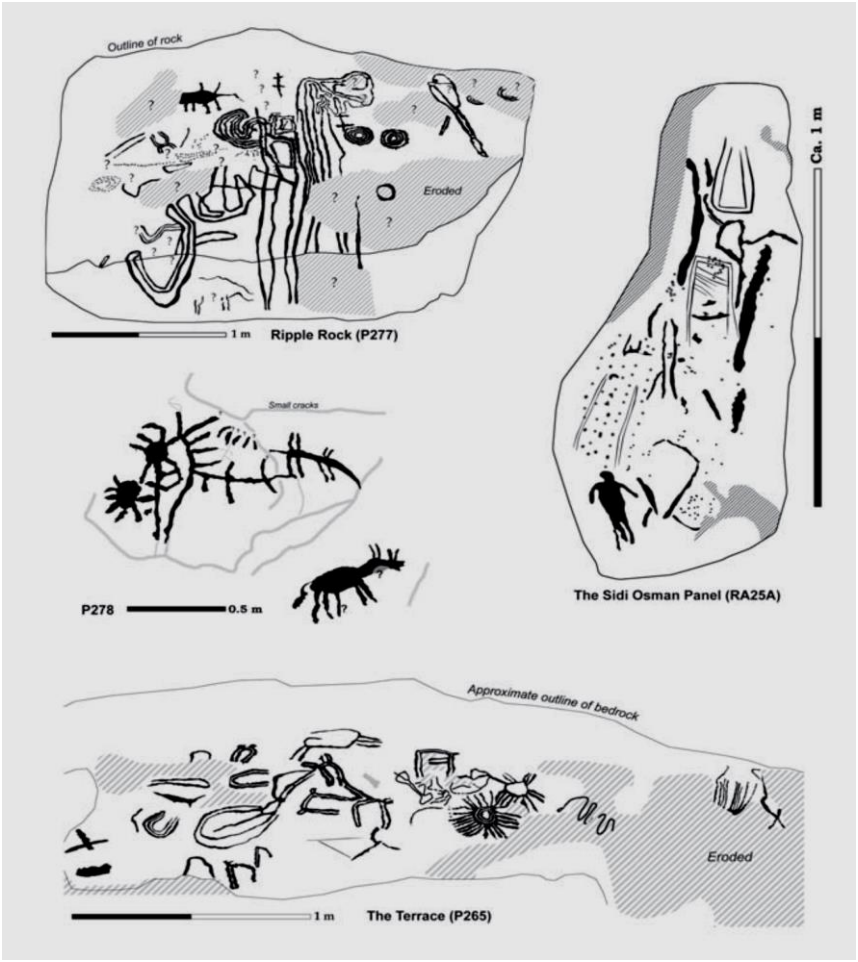
[FIGURE 19]: Circle motif with humans and animal figures at Sibafo, Zimbabwe. PRINS 1994: FIG.3.

In Africa, the spiral or circle motif is considered a symbol of life. The spirla or circle motif is like the unseen link between two people, or the umbilical cord that connects the mother and the fetus. The motif looks as though it stood for a mysterious or magical flow between mother and child when they are in a dangerous situation[89].

In Egypt, geometric symbols appeared within the rock art decorations in the Western Desert in southern Egypt and were associated with climate change and drought. The increase of specialized pastoralism in the Neolithic era resulted in the Sahara. After 5300 BC, which rock art appeared in places such as Jebel Ouenat and Gilf Kebir. This suggests that people were searching for places with permanent access to water as the climate gradually changed, especially in northern Egypt[90]. Gharb Aswan has a varied assemblage with vast differences in geometric forms (circles, arches, net), whereas more complex designs are not only different but also extremely hard to compare. These simple forms are associated with «stylized» humans, crocodiles, some other figures such as «snakes» and handprints[91], and geomatic forms, all of which relate to *rainmaking*. There are comparable motifs present among the «rolling lines», spirals, circles, and other geometric designs near the Ghubari road between Dakhla and Kharga[92] **[FIGURE 20]**.

[88]PRINS 1994: 179.
[89]KI-ZERBO 1981: 675.
[90]BOBROWSKI 2021: 123.
[91]STOREMYR 2009: 128-130.
[92]STOREMYR 2009:136.

- These geometric motifs also reflected the rituals of «*rainmaking*».



[FIGURE 20]: Geometric rock art in the Wadi el-Tilal. STOREMYR 2009: FIG.13.

VIII- THE RITUALS OF *RAINMAKING*

In African belief, rain may be invoked by prayers. Both private and public, *rainmaking* rituals are reported in all parts of the African continent. Riverbanks, waterfalls, groves, caves, or mountains may be used as places for rain rituals. Rainmakers occupy a position of profound influence in the community. They not only make rain but also stop it when too much comes or when it is not welcome at a given moment. There are some sites in east and south Africa, which have suitable rainfall, where *rainmaking* is a lucrative and prestigious profession[93]. Rain was important and agreeable in African traditions, especially in dry areas. Incalculable prayers and rituals were enacted to provide rain as a main source of water for drinking and agriculture[94]. In Uganda, river spirits and rain-gods are considered the sources of life; the good rains came after a *rainmaking* ritual and a sacrifice. It seems impossible for a local healer or rainmaker to procure the necessary rains through prayer, sacrifice, and ritual[95].

1- The Ritual Dancing

Rainmaking in Africa is associated with many rituals such as «dance». The dance is considered a kind of prayer. Shamans and other persons jump and trying to catch the rain animal, and the imagery of trance was distinguished among the artists' subject matter[96]. The Akamba community in Kenya believed that unseen *rainmaking* ancestral spirits attended the Kilumi dances. The participants, therefore, were obligated to make excellent performances to impress the spirits. These dances were also attached with the pouring of libations and the offering of sacrifices to satisfythe spirits[97].

The ritual significance of rock shelters in *rainmaking* ceremonies was based on observations of the integration of Stone Age cultural material, especially in the form of rock art sites, which are found in many places in eastern such as Zimbabwe and in other parts of the southern African sub-region, particularly Mozambique and Botswana[98].

In general, dancing to bring rain was not only known in African tribes but also known among many of the primitive tribes[99].

2. *Rainmaking* Prayer

In general, rain making was connected with some rituals which expressed magic, and religion, and were often associated with dances, prayer, and offering sheep sacrifices[100].

During light droughts, tribes of northern Nigeria offer prayers under a baobab tree, but during severe droughts prayers for rain are offered on top of a rock; the priests carry two stones which they hit against each other because the stones symbolize extra power which brings rain.

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[93]SOUKOPOVA 2020: 80.
[94]WITZEL 2015: 21.
[95]OESTIGAARD 2019: 10.
[96]DAVIS 1984: 24.
[97]OMBATI 2017: 82.
[98]PWITI 2007: 103.
[99]GRAY 2009: 499.
[100]KI-ZERBO 1981: 675.

In the Ethio-Sudanese borderlands when the rainy season fails to come, people pray under a particular rock decorated with symbolic paintings of the ancients, which are believed to be possessed with magical powers[101].

IX- BURIAL OF ANIMALS

After 7000 BC, the emergence of domestic animals lead people away from a nomadic, hunter-gathering existence. During the sixth millennium BC, the decrease in seasonal rainfall resulted in the dryness of the Egyptian desert, and an increase in the desert spot in the western desert. In the first half of the fourth millennia BC, «full desert conditions were all over Egypt», causing populations to leave the Western Egyptian Desert in the Nile Valley[102]. During droughts, the importance of rain increased, and it was customary to offer sacrifices and animal burials. The phenomenon of animal burial was known in Nabta Playa during the Neolithic, which is why Wendorf named this place «Wadi of Sacrifices»[103]. To understand this phenomenon, we need to consider why this custom was prevalent so quickly and over such a big region, and what significance it had. There a was link between short-term or even sudden periods of drought and the corresponding ritual/social adaptations in pastoral Saharan societies to deal with the difficult conditions. The cause-and-effect relationship between the climate crisis at the end of 6000 BC and the emergence of cattle sacrifices and burials in the vast expanses of the Sahara at a similar time is particularly puzzling here. It should be emphasized that the legacy of animal sacrifice or other rituals related to animals was a long-standing cultural phenomenon.

In Qadan at the Tushka 8905 site in southern Egypt in the Sahara Desert, we could already observe the crucial role of the aurochs; the skulls of these animals were placed in graves to mark the head of the buried person. There was probably something that forced human groups to move and spread the practice of breeding cattle. There was also more megalithic architecture, which were used for animals, especially cows. there were many rituals developed by pastoral groups (related to *rainmaking* ceremonies). In Bargat El-Shab, there was a ceremonial center associated with the *rainmaking* rites, in addition to Nabta Playa[104].

The funerary importance of this site was confirmed through the small animal burials under the stones and the remains of seven small burials which were discovered on the western end of the huge valley north of Napata Playa, the «Valley of the Sacrifice» **[FIGURE 21]**. Wendorf clarified that the cattle burials may be considered a kind of sacrifice for animals connected with making rain, so these animal burials were offerings that indicate the existence of a cattle cult during the Neolithic period, around ca. 7500-7400. The discovery of cattle burials led to a reconsideration of the fact that this place had ceremonial activity in Napata, which was associated with a cattle cult[105].

[101]SOUKOPOVA 2020: 80-81.
[102]ANSELIN 2018: 635.
[103]WENDORF 1998: 108.
[104]BOBROWSKI 2021: 127.
[105]WENDORF 1998: 108.

[FIGURE 21]: Small rock-covered tumulus containing the burial of a complete young cow. WENDORF 1998: 1998: FIG.4.

The use of stone structures or megalithic buildings to bury cattle and other animals based on rites developed by pastoral groups (related to rain ceremonies) could have also served the purpose of designating territory by pastoral groups/families. Climate change, including a southward shift in the scope of cyclic monsoon rains, which started around the middle of the 4th Millennium cal BC, triggered the desertification process of the Eastern Sahara[106].

The Nubian Megalith also has circles of large upright stones with junior flat stones upon the burial. These are used during the ritual fire ceremony, and cattle are sometimes presented as a sacrifice as part of the ceremony[107].

X- THE RAIN ANIMAL SACRIFICE

Offerings or sacrifices often accompany *rainmaking* rituals until today. In the Kitui region of Kenya, they make a special ritual for making rain, where a girl and a boy drive a goat or a bull around a hill seven times. Then an old man slaughters the animal and some of the blood is poured into a sacred place. A similar concept of a sacrificed animal is known from the ethnography of the San people in South Africa. In an unconscious state, they hunt the rain animal, and sacrifice it. They lead it above the sky to the site of the sacrifice, where it is slaughtered in a dry place that needs rain, or to a nearby hill where the animal is killed and its blood falls like rain[108].

The kind of animal is challenged by the shaman, who recognizes it during the stage of trance and then orders the sacrifice of this animal. The most dangerous type of rain is associated with the sacrifice of bulls. The bulls are pushed from above High to bring heavy thunder rain, which is frequent in southern Africa[109] [**FIGURE 22**].

[106]ZUBIETA 2006: 201.
[107]WENDORF 1998: 118.
[108]SOUKOPOVA 2020: 80.
[109]SULLIVAN & LOW 2014: 216-217.

[FIGURE 21]: Men and women capturing a rain animal- Melikane and Mangolong- south Africa. SULLIVAN & LOW 2014: FIG.1.

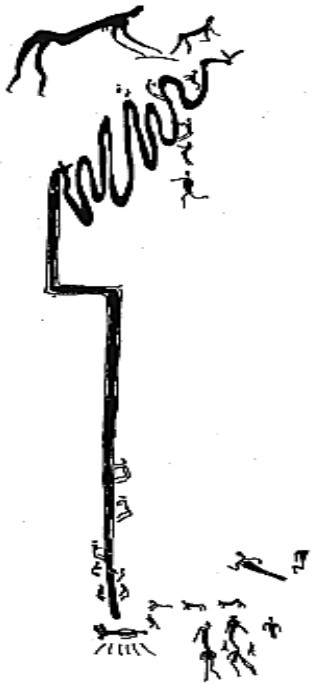
Animal sacrifice is also practiced in the Botswana community, in South Africa. Rain animals are sacrificed for making rain, which is shown in their traditional rites. These animal sacrifices relate to Sun symbols as a part of the same sacred background[110].

The black sheep was among the most special sacrificed rain animal. In the Oampo tribe a spotless black bull or a cow that had just carried a young calf and whose udder was dripping with milk was sacrificed. This type of practice is also found among their Kavango neighbors. Sometimes the sacrifice consisted of a young antelope or a young girl before puberty[111]. In Bushman tribes the Eland is considered the most important sacrifice animal, because it gives the shaman the strength and ability to reach the stage of ritual death, preparing for the rain[112].

XI- HUMANE SACRIFICES

The custom of human sacrifice was known in many African sites, and it was often associated with rainmaking. Some primitive tribes still offer human sacrifices or parts of the human body as an offering to bring rain within the rituals associated with ancestors and making rain[113]. In South Africa, at Waltondale, in the Marondera area of Mashonaland, a strange sight was found that is difficult to explain; it has been interpreted as a scene related to human sacrifice, which was part of the rain-making ritual in Zimbabwe[114] **[FIGURE 22]**.

[110]KI-ZERBO 1981: 675.
[111]SALOKOSKI 2006: 223.
[112] WILLIAMS 1987: 169.
[113]MASOGA 2018: 6.
[114]WOODHOUSE 1989: 20.



[FIGURE 22]: Human sacrifice during the *rainmaking* rituals. (Marondera- previously Marandellas - District, Zimbabwe.

WOODHOUSE 1989: ILLUS. 8.

Among the opinions that Woodhouse mentioned in his study is that this tree is considered the «tree of life» which rises from the body of the sacrificed victim[115].

[115]WOODHOUSE 1989: 20.

XII. CONCLUSION

Rainmaking was known in African rock art during prehistoric times. The drought and dry climate were among the most important reasons for rainmaking, especially during the Neolithic time.

ngRainmaki rituals have continued in Africa until today in many communities. The rock images depict rain making through many geometric and animal symbols and red stripes which refer to the red line on the Elands head. The eland appears in many scenes to be blessed and close to this sacred animal and the red line refers to the power of life in shamanic rituals.

Rain animals are known through rock art. The most important of the rain animals were deer, crocodiles, elephants, and cows.

The most important and most prevalent animals in *rainmaking* scenes were the Eland and snakes, which appeared in many ritual rain sciences in Africa. The elephant was one of the most important rain animals because it resembled a large sprinkle of water, so it was depicted in *rainmaking* images. *Rainmaker* was one of the most notable members of society, who was considered a mediator between God and the common people, and he was responsible for bringing rain .The rainmaker was responsible for making rain in many African sites, east and south, through dancing, prayer, or Mountain climbing.

Caves, mountains, and rock shelters were among the most sacred places for *rainmaking.* Crocodiles and lizards were among the most important rain animals, and this was demonstrated through rock art in east and south Africa. The spirits of the ancestors were one of the most crucial factors for making rain, which is why prayers and offerings were made to the spirit of the ancestors.

The snake was associated with *rainmaking* and was associated with the rainbow, which was considered in many sites in Africa as asacred necklace of God.

The Eland was considered a symbol of totemism. In a trance ritual, the shaman would jump on the Eland to become united with the sacred rain animal. This ritual was the shaman's attempt to associate with that sacred body in order to make rain.

Geometric decorations were among the most important symbols of *rainmaking*, and circles and spiral shapes were among the most important indicators of *rainmaking*.

The spiral ornament and the rope ornament were *rainmaking* symbols because they refer to the connection between the earth and the sky.

Cows and bulls were the most important rain-making animals, and the evidence of this was the burial of cows below the Megalith in Napata Playa.

There were practices and rituals performed to make rain, and dancing and entering the unseen world, and praying for God were among the most important of those rituals.

The custom of human sacrifice was among the *rainmaking* rituals that were known in various places in Africa.

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